been so well described by previous observers, that I shall content myself with simply pointing out a few of the more impor-

tant peculiarities in the present specimen.

The slit in the anterior part of the trachea is caused by the deficiency of ten rings in front. The right lip of the slit has cleven cartilaginous elements, the left only ten. The extra or eleventh cartilaginous element is owing to a small bar of cartilage being attached to the lower border of the right half of the uppermost incomplete ring. This corresponds somewhat curiously with the adult male and adult female of Dr. Muric's dissection (vide P. Z. S. 1867, p. 409). In his specimens the lowest incomplete ring bifurcated; in my specimen it was the uppermost incomplete ring, but it did not bifurcate.

As regards the number of incomplete rings my specimen agrees with that described by Mr. Robert Anderson (quoted

by Murie, l. c. p. 407).

The sac markedly springs from the lips of the fissure, and is evidently continuous with the elastic band intervening between the cartilaginous rings. Its walls were composed chiefly of the white or areolar tissue, but with much of the

yellow variety diffused through it.

In Dr. Murie's adult female bird there were certain bandlike duplications of the wall of the sac partially dividing it; in my specimen these were not present, the sac being simple and undivided. It may further be remarked of the latter that there was no cul-de-sac at the left upper end; but otherwise the general form agreed with that figured and described by Dr. Murie.

I am rather inclined to take exception to the close nature of the homology between it and the air-sac of the chameleon. In the Emu we have undoubtedly a tracheal pouch; in the chameleon it may be regarded more as a laryngeal pouch.

The specimen herein commented on is preserved in the Liverpool Free Library and Museum; and I may mention that I am indebted to the courtesy of the curator, T. J. Moore, Esq., for permission to examine the bird.

XXIX.—List of Lepidoptera in a small Collection sent from Peru by Mr. Whitely, with Descriptions of the new Species. By Arthur Gardiner Butler, F.L.S., F.Z.S., &c.

The present collection was made at Huasampilla, 9000 feet elevation. As regards the butterflies it is decidedly peculiar,

B.M.

the whole of the species being referable to the subfamilies Satyrina, Morphina, and Nymphalina of the Nymphalida. The bulk of the species are either identical with or closely allied to Bolivian forms, ten of the butterflies previously described having come from Bolivia.

RHOPALOCERA.

Family Nymphalidæ.

Subfamily SATYRINÆ, Bates.

Genus 1. Euptychia, Hübner.

1. Euptychia rustica.

Euptychia rustica, Butler, Cat. Diurn. Lep., Sat. p. 32, pl. 1. fig. 4 (1868). Previously known from Bolivia only.

Genus 2. ORESSINOMA, Westwood.

2. Oressinoma sorata. B.M.

Oressinoma sorata, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 144. n. 6 (1868).

Hitherto only known from Bolivia and of a smaller size.

Genus 3. LYMANOPODA, Westwood.

3. Lymanopoda ocellifera, n. sp. B.M.

Allied to *L. obsoleta*, Westwood. Above red-brown; a white point near anal angle of secondaries: primaries below ferruginous at apex; two large black ocelli between median branches, a third small one near external angle, and a white point between lower radial and third median; secondaries with a discal irregular series of seven white points crossing the wing obliquely from apex to anal angle, the fourth to seventh with black circling.

Expanse of wings 2 inches 2 lines.

4. Lymanopoda ferruginosa.

B.M.

Lymanopoda ferravinosa, Butler, Cat. Diurn. Lep., Sat. p. 169. n. 5, pl. 4, fig. 3 (1868).

The type was from Bolivia.

5. Lymanopoda rubescens, n. sp. B.M.

Wings above dark brown; apical half of secondaries castaneous in male, tawny in female, with the inner edge paler; 220

the apex and outer margin diffusely fuscous: wings below as in L. Lewna.

Expanse of wings: 3 1 inch 7 lines; 2 1 inch 8 lines.

We have the allied L. Lewna from Quito and Eastern
Peru.

6. Lymanopoda venosa.

B.M.

Lymanopoda venosa, Butler, Cat. Diurn. Lepid., Sat. p. 171. n. 14, pl. 4. fig. 5 (1868).

The type was from Bolivia.

7. Lymanopoda eubagioides, n. sp. B.M.

Wings above white; base metallic green, irrorated with black: primaries with costa, apex, and outer margin dull ferruginous; apical area from costa to outer margin at termination of first median branch, apical half of discoidal cell, a spot at base of second median interspace, and another in first median interspace and almost touching apical area black; an irregular sigmoidal spot at end of cell, an oblique fasciole halfway between cell and apex, and four unequal subapical discal points white. Wings below white: primaries with discocellular area from basal third of cell red-brown, interrupted by two obliquely placed whitish spots opposite to emission of second median branch; white spots as above; costa, apex, and outer margin pale ochreous; base and apical area pale cinereous; two dusky spots on median interspaces the upper one white-pupilled, partly encircled by an ochraceous lunule: secondaries dirty white, irrorated, especially towards the base, with fuscous atoms; two costal, three discoidal, two internal, and three median oblique brown streaks on basal area; a strongly arched series of seven black dots running from apex to interno-median interspace, near anal angle; cilia pale ochreous.

Expanse of wings 1 inch 9 lines.

Two examples.

This species is more nearly allied to *L. lactea* of Hewitson than to any other *Lymanopoda*: it has somewhat the aspect of *Eubagis pieridoides* of Felder; but the secondaries above have no black margin.

Genus 4. STEROMA, Westwood.

S. Steroma superba.

B.M.

Steroma superba, Butler, Cat. Diurn. Lepid., Sat. p. 172. n. 3, pl. 5. fig. 6 (1868).

The type was from Bolivia.

B.M.

B.M.

9. Steroma umbracina, n. sp.

Form of S. pronophila. Wings above olivaceous brown; primaries with the apical third slightly paler, the fringe alternately black and dull tawny: below nearly as above; secondaries with apical area cinereous brown, interrupted by a submarginal; interrupted, waved, dark brown line.

Expanse of wings 1 inch 7 lines.

Two examples.

Genus 5. Pedaliodes, Butler.

Pedaliodes Ereiba, local form peruviana. B.M.
 Pronophila Ereiba, Felder, Reise der Fregatte 'Novara,' iii. p. 469.
 n. 800 (1867).

A somewhat modified form of this species occurs in the collection. It differs from the typical race in its deeper coloration above and below, the obsolete character of the bands below, and the more ferruginous tint of the internal area; the white point is also rather further from the margin. The type of *P. Ereiba* was from Bogota.

11. Pedaliodes ferratilis, n. sp.

Wings above pitchy: below, primaries paler, externally hatched with blackish; fringe greyish, varied with dirty white; secondaries pitchy, hatched with blackish; internal area, excepting at base, ferruginous; a quadrate patch of the same colour, irrorated with fulvous, from first median branch to anal angle, bounded internally by an irregular central blackish line; outer margin broadly red-brown, bounded internally by a waved submarginal black line; a white point on first median interspace.

Expanse of wings 2 inches 5 lines. Allied to P. Pheretias of Hewitson.

12. Pedaliodes niveonota, n. sp. B.M.

Wings above pitchy: primaries below ferruginous; the costa brown, hatched with blackish, and clothed towards the base with yellowish hair-scales; a quadrate brownish spot at end of cell, beyond which, upon costa, is a cuneiform patch of pale yellowish scales; outer margin broadly brown, the internervular folds black; a squamose submarginal grey band, enclosing three white points and sinuated externally, near apex; secondaries olive-brown, hatched with blackish, and irrorated

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at base with silvery grey; some squamose submarginal markings of the same colour, and a broad central band slightly undulated and widening from apical costa to inner margin, where it becomes distinctly white; also a silver-grey subquadrate spot, interrupted by subcostal nervure; five or six snowy white points passing through centre of disk, the three uppermost crossing the central band in an oblique line; fringe grey.

Expanse of wings 2 inches 5 lines.

13. Pedaliodes Pausia.

B.M.

Pronophila Pausia, Hewitson, Trans. Ent. Soc. Lond. ser. 3, i. p. 8. n. 16, pl. 4. fig. 25 (1861).

Slightly different from the type from Bolivia, but scarcely sufficiently so to be worthy of a different name.

Genus 6. Oxeoschistus, Butler.

14. Oxeoschistus mirabilis, n. sp. B.M.

Form almost of O. Prochyta; but primaries shorter, less falcated. Wings above pitchy, with beautiful green shot in certain lights; fringe alternately black and pale sulphuryellow, more distinct on primaries than on secondaries; primaries below dark brown; the apex varied with yellow scales; interrupted by a very irregular apical submarginal black line, edged internally with white, and bounding a series of three increasing black blind ocelli, bounded internally by a bifid white subcostal spot; two or three obsolete ocelloid spots on disk: secondaries olive-brown, irrorated with white and yellow scales; a broad, very irregular, and angulated central band, edged on both sides with black, bounded by diffused silver bands; a discal series of eight large black discal ocelli with white pupils and squamose yellow irides; a very irregular submarginal black line.

Expanse of wings 2 inches 10 lines.

One of the most beautiful species in the collection, somewhat similar in the character of the under surface to some species of the genus *Dædalma*.

Genus 7. LASIOPHILA, Felder.

15. Lasiophila orbifera.

B.M.

Lasiophila orbifera, Butler, Cat. Diurn. Lepid., Sat. p. 182. n. 4, pl. 5. fig. 6 (1868).

Previously known from Eastern Peru, Bolivia, and Bogota.

Genus 8. Dædalma, Hewitson.

16. Dædalma Dorinda?

B.M.

B.M.

Dædalma Dorinda, Felder, Wien. ent. Monatschr. vi. p. 28 (1862);Reise der 'Novara,' iii. pl. 67. figs. 3, 4 (1867).

May be distinct, the type of Felder's species being from Bogota. The one specimen in the collection is somewhat different from Felder's figure, being larger, with the white marginal spots of primaries elongated; there are also several differences on undersurface of secondaries.

Genus 9. Pronophila, Westwood.

17. Pronophila variabilis, n. sp.

Allied to *P. Porsenna*; above more brilliantly shot with bronze, green, and purple, without indication of whitish spots, but with three black spots towards apex of primaries, and with two or three black spots towards anal angle of secondaries. General arrangement of markings below as in *P. Porsenna*, but no orange lunule in primaries; the latter brown, deeper on disk, with the nervures and a band enclosing the ocelli whity-brown; margin broadly brown: secondaries brown, more or less inclining to whitish, with central and subbasal bands darker than in *P. Porsenna*; eight discal ocelli black, white-pupilled, with pale brown iris, surrounded by darker brown, and encircled by a whitish zone; a broad dark brown marginal border, edged internally with lilacine.

Expanse of wings 3 inches 4 lines.

The allied P. Porsenna comes from Quito and Bogota.

18. Pronophila venerata, n. sp. B.M.

Upperside black, shot with purple; primarics with a quadrate white spot crossing the centre of the first median interspace; three subapical white spots, the uppermost bifid, running obliquely from costal to just beneath lower radial nervure: secondaries with fringe ferruginous; a large white patch, crossed by the third median branch, and trisinuate externally, on disk beyond end of cell. Primaries below black, white spots as above; apex broadly ferruginous, irrorated with orange; three subapical dusky white-pupilled ocelli, forming an angular series to second white spot: basal half of secondaries red-brown, the ordinary bands of *Pronophila* indicated by deeper brown; apical half variegated with yellow, red-brown, pale ochreous, and silver, as follows:—apex red-brown;

anal angle blackish; second median interspace to marginal border pale ochreous; anal margin to third median branch yellow irrorated with red-brown, deeply undate internally and edged with silver; above the third median the margin becomes red-brown, and is partly edged with silver and partly with yellow scales; eight discal ocelli black, white-pupilled, with squamose yellow irides, excepting on second median interspace; anal area irrorated with silver scales.

Expanse of wings 3 inches 5 lines.

One of the most remarkable butterflies that has come for years. It is utterly unlike any other *Pronophila*; and in the shape of the secondaries, which project somewhat at termination of third median branch, it reminds one of the species of *Hetwera* and *Pierella*.

Genus 10. Corades, E. Doubleday.

19. Corades Iduna, local form marginalis*. B.M.

Corades Iduna, Hewitson, Ann. & Mag. Nat. Hist. ser. 2, vi. p. 437 (1850); Hewitson & Westwood, Gen. Diurn. Lep. p. 355. n. 2, pl. 63. fig. 1 (1851).

The typical form is from Bolivia; the species has a third form in Eastern Peru (not Nauta on the Amazons), described at p. 185 of my Catalogue of Satyridæ, and which may take the name of *C. peruviana*.

20. Corades fusciplaga, n. sp.

Allied to *C. Cybele*. Above like *C. Sareba*; differs below from *C. Cybele* in the dusky tint of all the wings, and in the orange patch of primaries being replaced by a somewhat smaller pale brown patch.

Expanse of wings 3 inches 2 lines.

C. Cybele is from Bogota, C. Sareba from Bolivia.

21. Corades Cistene. B.M.

B.M.

Corades Cistene, Hewitson, Exot. Butt. iii. p. 72, pl. 36. figs. 4, 5 (1863).

Specimens previously in the Museum from Quito and Bogota differ from the typical form in the smaller size of all the tawny spots above.

^{*} The orange patch on secondaries carried on to the margin, without marginal ferruginous border.

Subfamily Morphina, Butler.

Genus 11. Morpho, Fabricius.

22. Morpho Lympharis, n. sp. B.M.

Allied to M. Sulkowskyi; considerably smaller; the blue

tint deeper on male, paler on female.

J. Above, primaries with costa more convex and outer margin more concave; brown border of apex and outer margin less than half as wide: secondaries more produced at anal angle, with black margin reduced to a narrow line; spots at anal angle considerably smaller, the red spots paler. Below, all the markings more dusky: primaries with markings in cell more regular, the fasciole at end of cell strongly angulated; five distinct ocelli on disk; marginal bands narrower: secondaries with all the transverse bands, excepting the fourth and seventh from base, reduced to lines; the ocelli blacker, broader, those on anal area subcordate; submarginal band reduced to a dark brown line; red spots obsolescent.

Expanse of wings 3 inches 8 lines.

2. Above, primaries with outer margin less convex, less yellow-tinted; costa pale brown to end of cell; discal brown band containing four distinct white spots; its outer edge nearly straight; submarginal white spots ill-defined, forming a continuous increasing band from subcostal nervure to inner margin; submarginal brown band much narrower; secondaries with ochraceous area half the width, more dusky, especially internally; the anal angle distinctly black, exhibiting three red spots; a distinct white spot on each side of the caudal process. Below, all the markings more dusky, the bands being either olivaceous brown or black: primaries with base brown; bands in cell more regular, the first brown with black margin, the second black, its upper two thirds wide, the lower third suddenly narrower; terminal fasciole dull pale ochreous, with black margin; lunated transverse band beyond cell black; ocelli larger, five in number, the first four being united and equal in size; a regular brown band on either side of the series; submarginal band dark brown: secondaries with the broader bands narrowed, olivaceous brown, with dark brown margins; narrow bands black; ocelli five in number, large, the lower four united, black, with large elongated silver pupils, brownish ochraceous irides, and indistinct whitish zones; area beyond them olivaceous brown, beyond which is a slightly undulated silver submarginal band, intersected by a narrow dark brown

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band; anal angle dull griseous, intersected by a black band, and bearing two red spots, brighter than in M. Sulkowskyi.

Expanse of wings 3 inches 10 lines.

Quite distinct from the New-Granadan M. Sulkowskyi.

Subfamily NYMPHALINE, Bates.

Genus 12. Paphia, Fabricius.

23. Paphia tyrianthina.

B.M.

Paphia tyriauthina, Salvin & Godman, Ann. & Mag. Nat. Hist. ser. 4, vol. ii. p. 148. n. 17 (1868); Hewitson, Exot. Butt. iv. Paphia, pl. 2. fig. 4 (1869).

The type was from Bolivia.

Genus 13. HETEROCHROA, Boisduval.

24. Heterochroa Aricia.

B.M.

Heterochroa Aricia, Hewitson, Ann. & Mag. Nat. Ilist.xx. p. 263, pl. 21. fig. 11 (1847).

The type was from Bolivia.

Genus 14. Cybdelis, Boisduval.

25. Cybdelis Whitelyi, n. sp.

B.M.

Primaries above as in *C. Diotima*; secondaries with broad silvery greenish outer border, from which to end of cell extends a metallic subtriangular blue patch: primaries below nearly as in *C. Diotima*, but with two lilacine spots between median branches; secondaries as in *C. Cecidas*.

Expanse of wings 1 inch 8 lines.

C. Diotima has been taken in Bolivia and Quito, C. Cecidas in Eastern Peru.

I have named this pretty little species after its indefatigable collector.

Genus 15. Eurema, E. Doubleday.

26. Eurema Lethe.

B.M.

Papilio Lethe, Fabricius, Ent. Syst. iii. 1, p. 80. n. 250 (1793).
Hypanartia Demonica (part.), Hübner, Samml. exot. Schmett. ii. pl. 26.
figs. 3, 4 (1806).

Rather larger than the typical form from Brazil, Venezuela, and Mexico, and with the secondaries above darker.

27. Eurema Dione. B.M.

Vanessa Dione, Latreille, in Humboldt and Bonpland's Obs. Zool. ii. p. 87, pl. 37. figs. 1, 2 (1811-19).

Genus 16. DIONE, Hübner.

28. Dione Moneta.

B.M.

Dione Moneta, Hübner, Samml. exot. Schmett. (1816-24).

Agraulis Glycera, Felder, Wien. ent. Monatschr. v. p. 102. n. 75
(1861).

Felder erroneously renamed Hübner's species, supposing that the insect figured in the 'Genera of Diurnal Lepidoptera' was a representation of it; the species there figured, however, is identical with that figured by Poey, and is clearly distinct from D. Moneta. I therefore propose to call it D. Poeyii.

29. Dione Telesiphe.

B.M.

Colænis Telesiphe, Hewitson, Trans. Ent. Soc. ser. 3, vol. v. p. 564. n. 8 (1867).

The type was from Ecuador.

HETEROCERA.

Family Zygænidæ.

Genus 17. PŒCILOSOMA, Hübner.

30. Pæcilosoma Vesparis, n. sp. B.M.

Wings hyaline, with nervures and a very slender marginal border black; primaries above with base and costa irrorated with pale yellow; secondaries with costa pale yellow, inner margin golden yellow; body blue-black, the thorax streaked with golden yellow, the abdomen banded with the same colour; palpi yellow; antennæ black; legs black above, yellow below: wings below nearly as above; primaries with basal half of inner margin yellowish white; secondaries with costa bright yellow.

Expanse of wings 1 inch 3 lines.

Genus 18. Chrysocale, Walker.

31. Chrysocale florella, n. sp. B.M.

Primaries above burnished copper, with greenish reflections; apical third of cell, enclosing a hyaline spot, black; outer and inner margins broadly dark brown; secondaries dark brown; costa whitish; abdominal half of wings and a spot beyond the cell irrorated with metallic green; apical third of cell hyaline; body black, dorsum coppery red; abdomen above clothed with metallic-green and brassy scales, a row of whitish spots on each

side; head black, with collar green; tegulæ black, with large white central spot; antennæ black: wings below altogether paler than above; hind wings with costa metallic green.

Expanse of wings 1 inch 7 lines.

Family Lithosiidæ.

Genus 19. Chrysauge, Hübner.

Group Flavinia, Walker.

32. Chrysauge limbata, n. sp.

B.M.

Wings above and below golden-yellow, with the margins rather broadly black-brown; body brown; abdomen with a lateral yellow streak; a brush of white hairs, slightly ochreous at base, emitted from side of thorax at base of secondaries.

Expanse of wings 1 inch 6 lines.

Family Arctiidæ.

Genus 20. ANAXITA, Walker.

33. Anaxita sannionis, n. sp.

B.M.

Allied to A. decorata. Primaries above with basal half ochraceous, apical half crimson; the nervures and internervular folds black; the median nervure and all the nervures on disk enclosed in greyish-olivaceous ("hoary," Walker) bands, edged with dark brown; a fasciole of the same character at base, a second crossing basal third, and a third just before end of cell, the second continued to inner margin, and another, corresponding to the terminal discoidal fasciole (although not continuous with it), running from base of first median branch to inner margin; a basi-costal spot, a streak above median nervure (extending from the second to the third transverse fasciole), the interno-basal area, and a round spot between the two fascioles beyond it crimson: secondaries rosy-crimson; the apex, outer margin, a triangular patch at anal angle, and the nervures from the median upwards, excepting at base, brown: body crimson; collar and tegulæ golden-yellow, brownedged; abdomen with brown dorsal line; anus and venter blackish, with three golden-yellow spots on each side; legs and antennæ brown. Wings below nearly as above; primaries with all the bands brown, a black costal spot on each of the discoidal fascioles, basal area rosy; secondaries with a yellow subcostal striole.

Expanse of wings 3 inches 2 lines.

Much like A. decorata, but differing in colour and with

none of the nervular bands of primaries continued to the cell; the nervular brown streaks of secondaries also continued nearly to base of wings.

Family Erateinidæ.

Genus 21. ERATEINA, Doubleday.

34. Erateina latipennis, n. sp.

B.M.

Primaries above as in E. undulata, but the transverse yellow band reduced to a line; secondaries very similar to E. undulata, but broader, with central band deep orange instead of red, and much broader: below somewhat similar to E. undulata, more orange in tint, with narrower central transverse band; the silvery area reduced to a narrow squamose streak limiting a broad subbasal chocolate band; the discal yellow band much widened, especially on primaries; the area between subbasal and discal bands orange; fringes varied with orange instead of pale yellow.

Expanse of wings 1 inch 8 lines.

35. Erateina cometaris, n. sp. B.M.

Nearer to *E. Neæra* than to any other described species. Wings above with basal half greenish cinereous, with bronzy reflection, apical half black; primaries with central abbreviated, broad, white, oblique, hyaline band: secondaries with central white streak, obsolescent towards costa; a subanal crimson spot; fringe alternately black and white. Wings below plum-coloured; nervures of basal area and two oblique central bands, broadest on primaries, silver, an oblique transverse discal streak gold; primaries with internal area silver, outer central band hyaline in the centre; secondaries with golden discal streak abbreviated, disappearing as it reaches outer central band; fringe alternately black and white.

Expanse of wings 1 inch 7 lines.

36. Erateina discalis, n. sp. B.M.

Primaries above black, basal area and a trifid hyaline spot crossing median branches and end of cell snow-white; costal and subcostal nervures red; secondaries snow-white, a broad marginal black border, fringe alternately black and white. Body black, thorax clothed with whitish hairs; abdomen white-banded above, white below, with lateral series of red spots; head white, front and antennæ red, palpi and legs black and white. Primaries below plum-coloured; internal area and central transverse band silvery white, the band hyaline in the centre; basal half of costa irrorated with orange; the base and

a small oblique dash in cell white: secondaries silvery white; a cunciform spot and two dots in cell; a large cunciform patch on inner margin, a somewhat broad marginal band terminating above in a quadrate spot upon subcostal nervure, and spots on the fringe opposite to terminations of nervures reddish plum-colour irrorated with orange.

Expanse of wings 1 inch 1 line. Allied to E. Cynthia from Bolivia.

Family Ennomidæ.

Genus 22. Azelina, Guenée.

37. Azelina, sp.?

Allied to A. xylinaria. The specimen is scarcely in a sufficiently good condition for accurate determination.

XXX.—Additions to the Australian Curculionide. Part V. By Francis P. Pascoe, F.L.S. &c.

LEPTOPINÆ. ATERPINÆ. Rhinaria perdix. Leptops argillaceus. —— fasciata. musimon. muricatus. Æsiotes leucurus. - morosus. Rhyparosominæ. BELINÆ. Dysostines cellaris. Pachvura vestita. Belus ganglionicus. Cylindrorhininæ. Isacantha exigua. Perperus urticarum. EURHYNCHINÆ. variegatus. Eurhynchus maculatus. Ocynoma, n. g. — antennata. — cordipennis. Læmosaccinæ. Læmosaccus ocularis. Decienus, n. g. — longiceps. — sphasodes. --- semiustus. — funereus. GONIPTERINÆ. - gibbosus. — querulus. Oxyops Mastersii. — memnonius. — calidus. - tarsalis. --- magdaloides-- pruinosus. ---- fulvirostris. — meles. CRYPTORHYNCHINÆ. --- sparsutus. — floreus. — rutilus. Tentegia, n. g. — favosa. Syarbis semilineatus. Poropterus prodigus. - nervosus. Axides, n. g. dórsalis. Pantoreites cretatus.

Tychreus sellatus.

— Breweri.